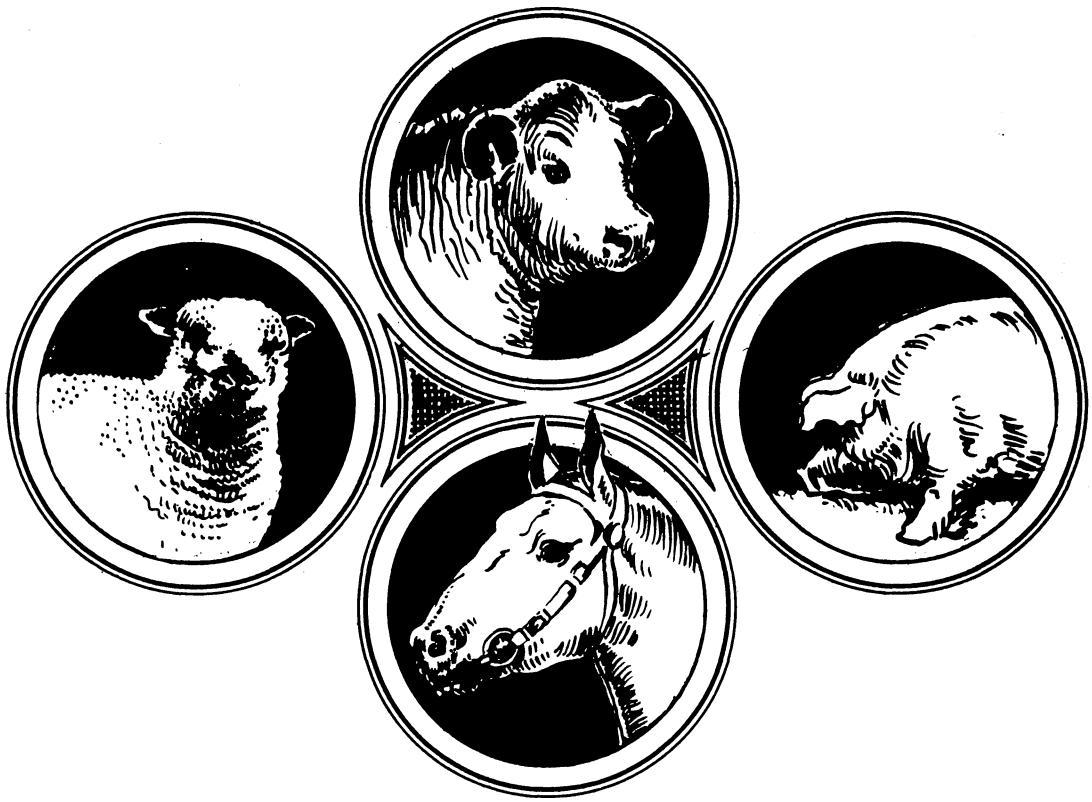
Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

VERTICAL FILE
MIMEOGRAPHED MATERIAL
APR 1 1 1939
O. E. S. LIBRARY

The EXTENSION ANIMAL HUSBANDMAN



UNITED STATES DEPARTMENT
OF AGRICULTURE
WASHINGTON,
D.C.

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C.

THE EXTENSION ANIMAL HUSBANDMAN

Issued quarterly by the Bureau of Animal Industry
and Extension Service, Cooperating.
C. D. Lowe, Senior Extension Animal Husbandman,
K. F. Warner, Senior Extension Meat Specialist.

Serial No. 53 --March 1939

Special Articles in this Issue: Page

Minnesota Methods, by W. E. Morris 2

4-H Clubs Improve Utah Sheep, by A. C. Esplin 7

Forage Production and Utilization Stressed in Arkansas Extension Program, by M. W. Muldrow 10

Illinois Livestock Extension Work, by E. T. Robbins 12

Work Stock Clinics, by R. S. Sugg 15

Better Sires Work in Virginia, by Geo. C. Herring 17

Beef Sire Ratings at the "International", by James R. Douglas 20

Also:

Nonrail Receipts of Livestock, 1938 5
Personal Notes 6
National Planning 9
Regional Lamb Conference 11
Extension Teachers 11
Leisure 14
Missouri Colt Club Data 16
Man's Noblest Friend 16
Farm Management and Land Use 16
The Democratic Porker 18
The Significance of Hog Type 19
Southern Agricultural Workers' Meeting 19
Pig Crop Data 21
Recent Publications 21

MINNESOTA METHODS

By W. E. Morris, Extension Animal Husbandman,
Minnesota Extension Service.

- - -

The local extension service in one Minnesota county recently conducted panel discussions in all communities of the county on the topic "Use of Non-Depleting Acres." Practically, this meant use of hay and pasture crops resulting from the agricultural conservation program. Thus the communities participating were made conscious of the relationship between conservation and livestock production. Our livestock extension program has not changed as a result of the AAA programs; the approach, however, has been materially changed. For years we have urged increased acreages of legumes and pasture crops. The agricultural conservation programs have brought this about. We need no longer work for increased forage production as long as this is being done more effectively by others. Our approach now aims to obtain the wisest use of these roughages and pastures. This will be accomplished only to the degree that producers appreciate the nutritive and economic value of their legume hays, and pasture crops.

As a part of our educational effort in this field, feeding schools are conducted. They are held for beef cattle, sheep and swine producers. They aim to teach the place of legumes and pastures in livestock production, with emphasis on the following:

1. By comparing the production per acre in total nutrients of these crops with other roughages and with grain.

2. By studying the specific deficiencies of grains and other roughages in proteins, minerals and vitamins for feeding various species and classes of livestock.

3. The relative economy of compounding a balanced ration from home-grown feeds as compared to the purchase of the needed supplements.

4. The importance and economy of good pasture in livestock production as indicated by the nutrients supplied, the completeness of the ration, the returns per acre and the low cost and simplicity of utilization.

These points are the basis for our teaching programs in the livestock feeding schools. We aim to get down to fundamentals and interest our farmers in more intelligent feeding practices and give them a better understanding of the purpose of the conservation programs and

how best to utilize the more and better roughages and pasture crops. It develops in the producer a more satisfied feeling towards these programs because it shows him how to organize to take full advantage of them.

Minnesota ranks as an important livestock producing State. In cattle and calves we stand third in the nation, in the production of hogs, sixth, and in sheep, thirteenth.

Our extension program encourages an increase in beef cow herds in the State for the purpose of utilizing rough feeds on the farm, to consume pasture and to produce a crop of calves to be fed out as baby beef. The latter provides a market for surplus grain and some roughage.

Commercial cattle fattening problems are discussed at the feeding schools. Legume hay is studied as to the nutrients it contains and their values and combinations in steer fattening rations.

The swine production program urges the extensive use of pasture in the summer and some use of alfalfa hay for winter feeding of fall pigs and brood sows, for the purpose of supplying deficiencies common to winter hog feeding.

The sheep production program proposes the wintering of the breeding flock largely on legume hay and supplying an abundance of pasture so that the lambs may go direct to market from grass without grain feeding. This program further takes into consideration the control of parasites, the proper finish of lambs, and timely sorting, so that good feed can be made most effective in producing a top market product.

Our sheep program likewise recognizes commercial lamb fattening possibilities in the surplus grain areas of the State. These possibilities are favored by -

1. Winter climate suitable for lamb feeding.
2. Location between the source of feeder lambs and slaughtering places.
3. Surplus grain available for feeding.
4. Ease with which high quality legume roughages can be grown.

In addition to the feeding schools other methods are used in promoting our program. Some methods are more effective with certain phases so that different methods are used. In general they include -

1. Feeding schools
2. Demonstrations
   a. Feed lot
      (1) Grades of cattle
      (2) Equipment
      (3) Herd improvement
      (4) Feeding

b. Method - as drenching lambs - docking - castrating
c. Tours - to see what or how others are doing
d. Sire exchange days - selection and judging

3. Publicity - Discussion of timely practices released to farm papers and to the daily and county press.
4. News letter - Sent to mailing lists of producers provided by county agents. Problems of producers are discussed and practices recommended for efficient production.
5. Meetings - such as institutes - Subject-matter discussion as a part of the program.

The feeding school is the most effective place to teach feeding. There the topic, with proper facilities such as blackboards, etc., available, can be handled to better advantage than on a tour or in a feed lot. Such a meeting is no place to demonstrate drenching, the selection of feeders, castrating, and such. These can be handled effectively only where animals are present and the spectator actually participates. The last is most desirable as once a person has done a thing, he does not hesitate to do it again. Seeing it done is next in value and much more effective than hearing how to do it. Farm or feed lot tours provide an opportunity to observe practices and equipment and we find them very much worth while.

Publicity does not take the place of any of the above but supplements them all. It is effective for providing specific data such as a ration or the results of an experiment and also may be used as a reminder to do a certain thing at a certain time.

The news letter serves somewhat the same purpose but has the advantage that it is put into the producer's hand and not left so much to chance as in a news item. It also has a more personal touch that is of value. Thus various methods have their place and all must be used at various times and places to effectively promote an extension program.

Close cooperation with and by county workers is needed to accomplish much. The county worker has such varied activities and a full program that the specialist must help him materially. We have found that supplying the county agent with subject-matter charts and short subject-matter discussions for him to use, has been appreciated and very helpful in promoting our work.

We have also found that it is more effective in promoting certain phases of our program, such as parasite control, if a group of counties rather than single counties are approached. Farm meetings and tours are arranged in such blocks of counties which save time as well as bring better results.

Publicity on the project is released to the press from the central office. A series of letters, the same for all counties, is prepared at the central office and supplied the agents, for mailing to their producers. More thought and careful preparation are given to these letters than would ordinarily be possible by the individual agent. Posters are prepared and distributed the same way. This group appeal and build-up by publicity letters and posters have been most effective in creating public interest in our project and in bringing an audience to our meetings. We realize that the more producers we can reach and influence the more effective our efforts will be and the more improved practices will be adopted. Anything that interferes with contacts tends to reduce efficiency, so we try to maintain as many contact mediums as possible.

----------oOo----------

NONRAIL RECEIPTS OF LIVESTOCK, 1938

The table below presents the "drive-in" (nonrail) receipts of livestock in 1938 at 17 principal markets, also the percentage such receipts were of the total receipts. Based on total reported receipts at the listed markets, the percentage of each class of livestock classified as "drive-ins" was as follows - Hogs, 71.43 percent; calves, 65.10 percent; cattle, 59.09 percent; and sheep and lambs, 30.89 percent.

Market	No. head "drive-ins"	Percentage of total receipts
St. Paul	3,152,777	67.88
Chicago	3,021,347	34.72
East St. Louis	3,017,954	62.83
Indianapolis	2,648,307	96.50
Fort Worth	2,071,574	72.19
Omaha	1,917,720	46.09
Sioux City	1,728,124	71.71
Kansas City	1,204,948	33.93
St. Joseph	1,178,032	57.13
Cincinnati	1,159,964	76.73
Oklahoma City	1,030,242	85,71
Milwaukee	763,514	68.80
Sioux Falls	624,119	95.08
Wichita	622,288	80.71
Louisville	588,624	77.30
Denver	519,875	12.86
Portland	260,176	40.58
Total	25,509,585	Average ... 54.31

----------oOo----------

Oliver Wendell Holmes divided the human race into two classes. First, those who go ahead and do something; second, those who sit and inquire: "Why wasn't it done some other way?".

----------oOo----------

PERSONAL NOTES

Alabama

R. S. Sugg is now in charge of all phases of animal husbandry extension work at the Alabama Polytechnic Institute. F. W. Burns who formerly handled the swine phase is now devoting full time to the dairy project.

Maryland

J. M. Vial, extension animal husbandman, is spending a 30-day period in New York State where he is assisting the extension animal husbandmen with certain phases of their program.

Mississippi

C. J. Goodell, who has been assigned to animal husbandry extension duties for several years is now in charge of publications for the Mississippi Extension Service. The change became effective on January 15, 1939.

Missouri

J. W. Burch was made director of extension on January 1, 1939. Mr. Burch was extension animal husbandman in Missouri from 1923 to 1934 and assistant director in charge of extension from 1934 until his recent promotion.

Nebraska

Ross H. Miller, part-time extension animal husbandman, coached the high ranking teams in the intercollegiate meat-judging contests at the most recent American Royal Live Stock Show and the International Live Stock Exposition.

North Dakota

George J. Baker, former extension animal husbandman and more recently acting director of extension, died on January 15, 1939, after a long period of ill health.

Oklahoma

W. L. Blizzard, head of the animal husbandry department in the Oklahoma A. & M. College, was recently made dean of the college and director of the experiment station at the same institution.

Tennessee

C. C. Flanery, formerly sheep extension specialist in Tennessee has been appointed chief of the division of markets in the Tennessee State Department of Agriculture.

Virginia

J. P. Keene, formerly extension animal husbandman at the Virginia Polytechnic Institute and now operating a livestock farm at Summit Point W. Va., was awarded the grand championship on a carload of fat steers at the Baltimore (Md.) Fat Stock Show in October, 1938.

----------oOo----------

4-H CLUBS IMPROVE UTAH SHEEP

By A. C. Esplin, Sheep and Wool Specialist,
Utah State Agricultural College.

- - -

Sheep club activities in Utah have been associated with adjustments and other changes in the sheep industry of the State. Some areas of summer grazing lands have been fenced as pasture for growing lambs to market size and finish. Early spring lambs are produced by a process of shed lambing in the winter and growing the lambs to market size and finish on ewe's milk and the grain creep. These changes toward higher unit production, more meat, and more wool per ewe, has favored 4-H sheep projects.

Sheep clubs have enrolled between 75 and 125 boys and girls annually in Utah over a period of 12 years. The members have owned sheep of the principal breeds, including the popular Rambouillet. The breed they used or the price they paid has not been the most important factor. What the boys and girls actually learned has been of first importance and the quality of sheep secured second in determining the value of sheep club work.

The greatest competition met by club members with Rambouillet sheep has been in the open classes of our largest State shows. First and second prizes on Rambouillet ram lambs have been won by 4-H Club boys at the Utah State Fair in the open class. Club members have also taken a good share of the premiums, including championships in Hampshires, Suffolks, Lincolns, and Cotswolds in the largest shows of the State. Club members have been encouraged to keep their sheep after they finish formal club work. Many former club members are now club leaders, using their own sheep as demonstration flocks for the benefit of club members.

The educational program of 4-H Club work is considered of more importance than the financial returns, although no club member who followed instructions has lost money. Not all club members, of course, have continued to raise sheep.

The State has benefited from club work in better sheep husbandry and also by improvement in the type and quality of sheep. With the trend towards mutton breeds, Utah is increasing its Suffolk and Hampshire breeding stock. Sheep clubs have supplied part of this demand and several former club members are established in the purebred business. As an example, the case of Millard and Roscoe Andrus of Summit County is cited. These brothers enrolled as club members in 1927, at the ages of 12 and 14 with purebred Hampshire

sheep and at present are successful sheepmen. They have taken part in practically all phases of sheep club work. Millard is leader of the local sheep club and Roscoe and two sisters are students at the Utah State Agricultural College.

The following statement made by Millard in 1937 includes some of the details of their experiences -

"In the fall of 1927 my brother and I together bought five head of registered Hampshire ewes from J. Nebeker and Sons at a cost of $32.50 per head. Our local banker loaned us the money with which to make the purchase. The next fall we borrowed more money to enable us to buy eight more ewes. The following fall we sold enough rams to cover the entire indebtedness at the bank.

"We have exhibited our sheep at county, state, and interstate shows where we have won numerous ribbons, including championships and other special prizes. In 1930 Roscoe won the Cudahy Packing Company award which was a free trip to the National 4-H Club Congress held in Chicago. He also won the state health contest that year. The same year I was awarded the Union Pacific scholarship which was $100 to be used in defraying expenses at any agricultural college. Two years later I won the Thomas E. Wilson award in the state which was a gold watch.

"During my six years of club work, I entered six sheep fitting contests and won four of them. We each have won a medal for high scores attained in judging contests. Medals, scholarships, and trips are very fine and give one quite a thrill but the greatest award comes in the opportunity they afford for meeting people and making friends.

"We have sold 114 head of rams at an average price of $21.57 per head. Our cash receipts for the ten year period from November, 1927 to November, 1937 have been $4,747.49 The expenses for the same period have been $4,695.60, and we have on hand 136 head of sheep valued at $20 per head, or a total of $2,720."

Somewhat similar results have been achieved in other areas. Juab County for example is referred to as a Suffolk sheep center, largely due to the persistent and intelligent efforts of 4-H Club members. The winter lambing areas find their Suffolk rams in Juab County where 4-H sheep clubs are fostered by both businessmen and farmers.

The old Utah Cotswold blood lines are maintained by 4-H club members in the ranch settlements near the Colorado and Wyoming State

lines and the quality of the Cotswold sheep is improving because of this 4-H club project work.

Joyce and Betty Adney are well known in Utah show circles and at the National Ram Sale. They have showed Rambouillet sheep and Southdown fat lambs in junior departments and open classes and have sold rams to leading breeders in Utah and Texas. They have demonstrated the value of sheep club work for girls as well as for boys. Joyce is ready for college in 1939-40 and has the Union Pacific Scholarship for her freshman year.

Sheep clubs have influenced sheep husbandry in Utah because of the emphasis which has been put on care and feeding for shows and sales, and because records of feed costs, lamb weights, rate of growth of lambs and fleece weights have been requirements. They have more information at their command than most farmers and are in position to trade intelligently with buyers of rams and of wool. Club members are not satisfied with less than one-half pound per day gain on their lambs from birth to 100-pound weight and many average three-fourths pound on small lots.

Rambouillet clubs are giving intensive study to the fleeces of their sheep. They gather and report fleece weights, staple lengths and secure shrinkage data from the college wool laboratory on their wool. The large, smooth bodied, long staple Rambouillet ewe is popular in 4-H clubs. Fleeces of 16 to 18 pounds' weight, from 60 to 62 percent shrinkage and from 2 1/2 to 3-inch staple are common in club sheep selections. Members are aware of these values in sheep breeding and are preparing to offer rams with not alone registration papers but records of production for several generations. They are careful with pedigree and other record work and have the confidence of breed associations and the prospective purchasers of their stock.

The careful feeding practices followed by club members produce results which impress and frequently are adopted by farmers. High unit production by 4-H sheep club members demonstrates methods in sheep husbandry which will increase farm income, build up farm fertility, distribute labor throughout the year and use forages economically. Sheep club work is having a wholesome influence on the sheep industry of our State.

----------oOo----------

NATIONAL PLANNING

Anyone who attempts to check the practice of national planning will argue in vain. As long as men have power to think, private citizens will go on devising plans for what they find amiss in social organization, and some of their plans will win general approval. Also, as long as we continue to encounter national emergencies from time to time our government will go on adopting hurried measures. The course of wisdom is not to oppose national planning, but to make that planning more intelligent. --Wesley Mitchell

----------oOo----------

FORAGE PRODUCTION AND UTILIZATION STRESSED IN ARKANSAS EXTENSION PROGRAM

By M. W. Muldrow, Extension Animal Husbandman,
Arkansas Extension Service.

- - -

During the last five years the Arkansas extension service has taken advantage of land made available through the Agricultural Adjustment Administration programs to increase the production of feed crops. Acreages in pasture and forage crops for the home milk cow and for feeding the work stock especially have been stressed.

Commercial livestock production programs such as those for early spring lambs and feeder calves have benefited from increased acreages in grass and roughage although numbers of such stock produced have not materially increased over the peak reached when prices were higher. Profits, however, have been greater because better pasture conditions and better wintering of ewes and brood cows have cut production costs.

Arkansas farmers increased their acreage of permanent pasture from 1,147,000 acres in 1934 to 1,817,500 acres in 1938, or more than 50 percent in a 5-year period. In addition, tame hay acreage increased 276,000 acres and annual legume hay, 143,000 acres in 1938 over the 1928-1932 average. A large part of the increased hay acreage has been due to an increase in lespedeza although there have been some increases in alfalfa, cowpeas, and soybeans for hay. It is estimated from reports by county agents that 10 million pounds of lespedeza seed will be sown in the spring of 1939.

Increased pasture acreages in many instances have meant complete sodding, (Bermuda in most cases), with overseeding of hop clover and white clover for early grazing and the use of separate blocks of lespedeza for late grazing. Interest in this type of pasture development has been stimulated much through spring and summer visiting days at the College of Agriculture's three branch experiment stations, where grazing tests are being conducted. These days are attended by farmers and 4-H Club members from all counties in the State under the direction of the county agents.

Field days have also been held in connection with pasture and forage production on farms where demonstrations are being carried.

Considering these developments, plans were started in the fall of 1938 for some hay and forage conferences in order to prepare

all agents and specialists for projecting a forage production and utilization program in the counties. Suggestions furnished by E. O. Pollock, extension hay specialist, U. S. Department of Agriculture, were used in developing the program which was carried out in four conferences held on February 27, 28, March 1 and 2, in each of the extension districts of the State.

The conferences were opened by discussions on the economic need for a study of forage production and utilization led by the district agents. Pasture and forage possibilities were discussed by the extension agronomist. A. D. Harlan, associate marketing specialist, U.S. Bureau of Agricultural Economics, discussed factors influencing quality of hay. Agricultural engineering in hay production and storage was discussed by the extension agricultural engineer and pasture and forage utilization was discussed by the extension dairyman and the extension animal husbandman. All topics were presented in such a manner that free discussion was made possible and the county agents and farm leaders present took full advantage of these opportunities, so that the working basis for sound forage programs was developed.

----------oOo----------

REGIONAL LAMB CONFERENCE

The fourth annual lamb production and marketing improvement conference was held at Roanoke, Va., February 16-17, 1939. The meeting was called by L. B. Burk of the U. S. Bureau of Agricultural Economics, who presided. Some 60 persons from Virginia, West Virginia, Tennessee, Kentucky, North Carolina, Maryland, Indiana and New York were present. They included extension and other college workers, State marketing officials, lamb producers, Federal workers, livestock commission representatives, packers, stock yard officials, lamb graders, etc. A full two-day program devoted to lamb production and marketing problems of the region was presented. It was considered the best conference of the series and a brief summary of the proceedings will be available from J. S. Robinson, Extension Service, University of Tennessee, Knoxville, Tenn., who acted as secretary.

----------oOo----------

EXTENSION TEACHERS

Extension work requires a new kind of teacher, one who helps rural people to analyze conditions, to relate situations as they now are on the farm and in the home to what they may be; and brings about technical economic and social changes for the better. It calls for teachers who guide and help to develop people rather than tell them, teachers who let the people themselves make the surveys, find out the facts, act on the committee, reach the decision, present the report, develop the program, write the important letter, make the speech, or preside at the meeting--teachers who submerge themselves in order that the ones they teach may get the experience and grow into efficient, accomplishing men and women; and in an unsually large degree that is the kind of teachers that are developing in extension. --Dr. C. B. Smith

----------oOo----------

ILLINOIS LIVESTOCK EXTENSION WORK

By E. T. Robbins, Livestock Extension Specialist,
University of Illinois.

- - -

Our activities with beef cattle, sheep, swine, and horses in Illinois are conducted under what we term the livestock management project. H. G. Russell assists the writer in the fields mentioned and besides, handles the extension work in meats and cold storage lockers.

In connection with our work an outline has been prepared especially for the use of county agents, and local discussion and project leaders. This outline explains briefly the most essential features and practices in handling livestock to secure greater financial returns. Its contents are based upon the information secured from experiment station work and the farm accounts of the most successful stockmen in the State. This outline has proved to be popular with Smith-Hughes teachers also.

In addition to this outline, last year Mr. Russell prepared some material especially for the use of sheep raisers under the title of "Illinois Sheep Improvement Program." This lists still more briefly the essential things which a farmer may do to make a success with his sheep. This outline proved so popular that others were prepared for beef cattle, swine, and horses. These shorter outlines are given to each man who enrolls in the livestock management project and serve as a guide or reminder for him concerning the things which he surely should do.

In each county a school is held, especially for the men who will serve as leaders in the project and will undertake to lead the discussion in local meetings. Others are welcome to attend. In these county meetings and also at local meetings enrollment cards are distributed to the farmers who agree to cooperate. They are asked to check the kinds of stock with which they will try to excel. They also check an item indicating that they use altogether purebred sires on their farms. Incidentally this latter item has shown that about one-third of the men enrolled use altogether purebred sires.

The enrollment now numbers 3,138 farmers in 64 counties. These are the men who are canvassed for locations where suitable demonstration meetings can be held during the year either singly or as a part of a county tour. In most cases the demonstration meetings are part of a tour. It is believed that the farm demonstration meetings do more than any other single thing to promote

good livestock management practices. On a farm the visitors can see for themselves just how well the better methods work. That seems to suggest to them the desirability of following the example. Apparently suggestion is more powerful than argument in introducing new and better methods. There has been a noticeable improvement in livestock management practices in this State during recent years.

At all times an effort has been made to keep the livestock management project in close accord with the general extension program in the State, and to fit it to meet changing economic conditions. In the winter of 1933-34 when it became apparent that grain prices would continue relatively low, a supplement to the livestock management outline was prepared under the title "Pasture in Handling Livestock to Increase Market Prices and Farm Incomes." The opening statement in this supplement explains the effort made at that time to coordinate the livestock program with other activities:

"The New Programs in farm affairs are bringing more pasture into the farm picture. Most of the contracted acres in the wheat reduction program will be seeded to grass and clovers. In the corn-hog project the one thing which a contract signer can do with the contracted acres without restraint is to sow permanent pasture and turn his stock upon it. The practical thing for some farmers to do is to take some of the poorer land for the contracted acres and to seed this with a mixture of grasses and clovers in the spring so as to provide for less grain and more pasture in the future. In other cases, especially where the best land on the farm has been limed and is well located for pasture, it will pay to use it for the contracted acreage. The best land produces the best pasture as well as the largest yield of harvested crops."

The greater use of pasture was given special emphasis. It seemed to be the principal change which stockmen needed to make to fit their plans into the program proposed two years later in the winter of 1935-36, by the county program building committees to reduce the acreage of grain crops and increase the acreage of soil-building crops. The consequence was that stockmen rapidly rearranged their plans to fit changing economic conditions.

At the present time there are still more pasture and roughage in prospect for the next few years. During the winter of 1938-39 in our county meetings and in publicity in connection with this project, farmers have been given suggestions about making a still greater use of pasture and hay.

Most Illinois pastures have been too small in the past for the amount of stock which they were expected to carry. With a larger acreage of pasture the same number of stock get more forage to eat

and therefore thrive better. From 300 to 400 pounds of beef to the acre have been reported with grazing cattle which eat plenty of forage. Another feature emphasized is the possibility of increasing the pasture season by turning stock out earlier in the spring and leaving the stock on pasture later in the fall. For example, E. D. Wyman, Vermilion County, in 1938, had his steers on pasture by March 22. Many good stockmen in the past have adhered to a policy of providing plenty of pasture, and details of their operations have been discussed at farmers' meetings. Some stockmen in Illinois regularly keep some pasture without any stock upon it in the summer and graze that land in the winter. They report that the returns per acre seem to be about the same for winter pasture as for summer pasture. They think the success of winter pasture lies partially in the fact that grass which is not grazed in the summer seems to make more total growth. Then there are some pastures which regularly have been grazed the year round, and these examples have been cited as possibilities in a new use of pasture on some farms.

Besides, it is thought that suggestions like these are better than encouraging farmers to stock up with stocker cattle at the high prices which are prevailing this season. By planning to make a better use of pasture with the stock which they now have they may take their time in increasing the numbers of their stock if that seems to be desirable.

Another feature of pasture utilization which is constantly emphasized is the advantage which is secured by turning work horses on pasture on summer nights and at all other times when they are not actually working in the fields. Many farmers can improve their procedure very much by following the example of those who have in the past made a large use of pasture for idle horses. In Illinois the farm account records show that very few farmers work their horses an average of more than 100 days a year. This means that more than two-thirds of the time the horses can be kept on pasture and foraging in fields from which crops have been harvested.

With this sort of set-up and methods the interest of stockmen in improved practices seems to be steadily increasing. It is expected that considerable increase in enrollments will be secured this year. Also a larger number of men have agreed to serve as local discussion leaders and demonstration leaders in their counties.

----------oOo----------

LEISURE

It would be utterly futile to give any person detailed instruction as to how he should spend the particular portion of leisure he happens to have. It would cease to be leisure if he had to use it according to rule. All you can do by way of educating him for leisure is to make him familiar with the field where the finer opportunities exist--the field of skill in games, and still more in art and craft—and then train him as an all-round man, a good judge of values, capable of making his own choice and developing his own technique.--Lawrence P. Jacks.

----------oOo----------

WORK STOCK CLINICS

By R. S. Sugg, Extension Animal Husbandman,
Alabama Extension Service.

- - -

It is estimated that Alabama farmers lose about 10 percent of their work stock each year. To replace this number of horses and mules, from 25,000 to 30,000 head would have to be purchased annually, which at current prices would cost from $3,500,000 to $4,500,000.

As many of the horses and mules on farms at present are old, defective teeth and improper feeding are large factors in this loss. Internal parasites also take their toll.

In order to meet this situation work stock clinics were organized on a community basis in the various counties of the State. The county agent would contact the local veterinarian and arrange with him to make the examinations and when necessary do the dental work and administer worm treatment. The charges for this service varied in the different counties but the average charge was about $1.00 per head. In counties where no local veterinarian was available, the State veterinarian cooperated by sending a qualified man to do the work. After arrangements for the veterinary service were made, community meetings were held and the work stock situation was discussed and plans for holding the clinics explained. Committees were appointed to assist in advertising and to arrange a time and a convenient place for holding the clinics. These meetings also gave an opportunity to discuss feeding and methods of management.

In some counties the community leaders were called into the county agent's office and plans made there, instead of holding community meetings. Generally more satisfactory results were obtained when community meetings were held.

Where only corn and grass hay were being fed the addition of one or two pounds of cottonseed meal per head daily was recommended. Mimeographed material on feeding and management was usually distributed.

The veterinarian would examine each animal and do the necessary dental work, and if thought advisable, administer treatment for bots and other internal parasites. Advice would also be given the owner for any other ailments or conditions that might be found.

This work was carried on in 22 counties during the winter and spring of 1938 and about 6,000 animals were treated. The project

will be carried on in 50 of the 67 counties of the State this winter and spring.

The county agents report that this is one of their most popular lines of work and that the results have been highly satisfactory. The work stock treated have gained in flesh, shed off early, and are able to do a full day's work. Less colic is reported in animals treated.

In many instances better methods of feeding and management were adopted after the clinics were held. This, in our opinion, was about as much responsible for the good results as the parasite treatment.

----------oOo----------

MISSOURI COLT CLUB DATA

Our colt production project is giving us some good teaching facts. In 1936-37 and 1937-38, the daily gains were 1.92 and 1.88 pounds per head respectively for 365 days. Feed to produce 100 pounds' gain, in addition to pasture and the mare's milk, were corn, 1.39 and 1.40 bushels; oats, 7.72 and 7.40 bushels; legume hay, 106 and 45 pounds; non-legume hay, 139 and 128 pounds; bran, 9 and 10 pounds; molasses, 9 pounds; and protein supplement 3.42 and 2.72 pounds. Better pasture in 1937-38 accounted for the decreased requirement of legume hay.

One man with oats for winter feed and sweet clover pasture put on his 720 pounds of gain per head for $19.00 plus pasture, while another cooperator put on 740 pounds with $42.00 worth of feed, and a third made the same gain with $77.00 worth of feed.

T.A. Ewing, Missouri Extension Animal Husbandman.

----------oOo----------

MAN'S NOBLEST FRIEND

Out from the past--the dim, bloody, shiftless past--came this noble equine, this noble animal, the horse; side by side with man, fighting with him the battles of progress, bearing with him the burdens of the centuries. Down the long, hard road, through flint and mire through swamp and sand, wherever there has been a footprint, there also will be seen a hoofprint. --John Trotwood Moore

----------oOo----------

FARM MANAGEMENT AND LAND USE

By far the most important farm management contribution to land planning will be made in the supermarginal areas - on lands that will continue to be used for agriculture, but where nevertheless, important adjustments are desirable both for individual operators and in the national interest, to promote conservation, or to influence supplies of agricultural products. --Sherman E. Johnson

----------oOo----------

BETTER SIRES WORK IN VIRGINIA

By Geo. C. Herring, Extension Animal Husbandman,
Virginia Extension Service.

- - -

Although carried on continuously in about the same form for a period of 15 years, the better sires project continues to be our most popular animal husbandry extension activity. In fact, results achieved in 1938 were the best for any year during the period of its existence, with 1,065 sires placed in 28 counties.

The project is conducted in the form of a contest between counties, with the county agent from the county making the best showing being awarded a trip to the International Livestock Show at Chicago. Counties are grouped into three classes, according to livestock population, excluding dairy cattle. Twenty points are given for each purebred sire placed in counties of relatively small livestock population, 10 points for sires placed in counties of relatively large livestock population, and 15 points for counties that are between the two. This method offers counties of relatively small livestock population a chance of winning where an outstanding job has been done.

Monthly awards are also made, during an eight months period, which tends to maintain interest in the project during the year and aids in obtaining reports. A monthly bulletin of progress is sent to the agents giving the winner of the previous month, reports of activities such as sire sales, unusual methods used, news stories, etc.

The contest has been financed at various times by national and State breed associations, the Virginia State Bankers' Association, and by contributions from other sources. It is expected that in the future our six State breed associations will finance it without other assistance.

Enrollment of counties is considered continuous from year to year and efforts of specialists is directed toward enrollment of new counties and in assisting in carrying out the program. A sire survey is an excellent method of beginning the work. This can be done through committees or otherwise. One county has raised funds and is now putting on an intensive survey that will reach practically all livestock producers of the county. From results of the survey the situation will be presented at meetings and through other means. Farm demonstrations, meetings, motion pictures, publicity and individual work have all been used in spreading the gospel of better sires.

There are now six active meat-animal breed associations in the State and specialists work with the organizations and their members to improve the quality of purebred herds and flocks, which of course provide the major portion of sires used in our commercial herds and flocks. Assistance is rendered such association with their sales and shows. During 1938, 10 purebred beef cattle sales were held with 145 bulls being sold, and at 10 ram sales in which 208 head of rams sold for an average of $31.45. The average price of rams in our sales has advanced each year since 1934. Two boar sales were also held. The total sale price of sires sold through auctions was $23,872.

There is, of course, some better sires work done in unorganized counties and reports from some enrolled counties are sometimes incomplete. However, far the best work is done in counties that keep hammering for a period of years on better sires and their value to the community. It is not effective if the effort is carried on for a year or two and then dropped. More work has been done on beef cattle and sheep than with other species as high quality is so important with them. Through continuous effort some of our counties have gained excellent reputations for quality feeder cattle and quality lambs, which has greatly increased returns to producers.

----------oOo----------

THE DEMOCRATIC PORKER

I have a friendly feeling towards pigs generally, and consider them the most intelligent of beasts, not excepting the elephant and the athropoid ape--the dog is not to be mentioned in this connection. I also like his disposition and attitude towards all other creatures, especially man. He is not suspicious, or shrinkingly submissive, like horses, cattle, and sheep; nor an impudent devil-may-care like the goat; nor hostile like the goose; nor condescending like the cat; nor a flattering parasite like the dog. He views us from a totally different, a sort of democratic, standpoint as fellow-citizens and brothers, and takes it for granted, or grunted, that we understand his language, and without servility or insolence he has a natural, pleasant, "camarados all" or hail-fellow-well-met air with us.

--W. H. Hudson in The Book of a Naturalist, 1919.

----------oOo----------

The world was not made for man alone, and man attains his true stature only as he realizes the dignity and worth of life that is not human. --A Hindu Poet.

----------oOo----------

It may be a good thing to have what money can buy, but it is a tragedy beyond expression to fail to have what money cannot buy.

--John J. Wicker.

THE SIGNIFICANCE OF HOG TYPE

In connection with the meat studies conducted at the Agricultural Research Center, Beltsville, Md., under the direction of O. G. Hankins, a summary was made of data on the carcasses of large, intermediate, and small type hogs of one breed slaughtered at final feedlot weights, within the narrow range of from 215 to 234 pounds, inclusive. It was shown that as type decreased from large to small there were marked increases in thickness of back fat and plumpness of ham. Major cuts that increased in percentage were: Bacon and fat, including skinned back fat, leaf fat and cutting fat. Major cuts that decreased in percentage, accompanying the decrease in type, were: Ham, picnic shoulder, loin, and shoulder butt. In dressing percentage there was little difference between the large and intermediate types but the small type hogs "dressed" considerably more than the others.

The following table gives supporting data.

Item	Type of live hog		
	Large	Intermediate	Small
Total number of hogs - - - - - - -	50	97	19
Thickness of back fat - - - - mm.	33.8	40.3	50.7
Index of ham plumpness - - - - - -	117.5	132.4	162.3
Cutting yields:			
Ham, trimmed - - - - - - percent	19.7	18.5	17.6
Bacon " - - - - - - do.	12.4	12.6	13.4
Fat, including skinned back fat, leaf fat and cutting fat do.	14.5	17.4	20.9
Loin - - - - - - - - - - do.	14.7	14.1	13.5
Shoulder (picnic) - - - do.	9.9	8.8	8.7
Butt - - - - - - - - - - do.	5.1	4.9	4.3
Dressing percent based on final feed lot and cold carcass weights - - - - - - - -	73.89	73.91	78.22

oOo

SOUTHERN AGRICULTURAL WORKERS' MEETING

The animal husbandry section of the annual Southern Agricultural Workers' Association meeting held at New Orleans, February 1-3, was favored with a splendid program and a large attendance. Extension animal husbandmen present were: W. T. Cobb and C. L. Hill of Louisiana; J.R. Hawkins and A.L. DuRant of South Carolina; A.L. Smith of Texas; Paul F. Newell of Mississippi, and L.A.Richardson of Tennessee. E.W. Sheets of Mississippi was chairman and J.R. Hawkins of South Carolina, secretary of the section. New officers elected were L.A. Richardson of Tennessee, chairman, and M.G. Snell of Louisiana, secretary.

oOo

BEEF SIRE RATINGS AT THE "INTERNATIONAL"

By James R. Douglas, Junior Animal Husbandman,
U. S. Bureau of Animal Industry.

- - -

In the last issue of this publication a rating of beef bulls on the basis of the winnings of their progeny at the International Live Stock Exposition in the 1927-36 period, was carried. The table below presents the same information for the 1937 and 1938 shows. The sires are listed in accordance with the total score each accumulated during the period. First place was given a credit of 10 points, second place 9 points, and so on to tenth place, for which 1 point was credited. In addition, 2 points were given for a senior or junior championship, and 2 points additional for a grand championship.

Breed	Name of bull	Total Score	Score by Sex		Score by year		No. of progeny placed
			Male	Female	1937	1938	
Aberdeen Angus	Eileenmere 85th	113	74	39	59	54	12
	Bandolier of Anoka	110	59	51	67	43	18
	Blackbird Bandolier of Page	67	45	22	47	20	10
	Ames Plantation Pal	65	11	54	33	32	10
	Envious Marshall 3rd	64	19	45	39	25	7
	Revolution of Page 43rd	53	32	21	29	24	12
	Black Peer of St. Albans	46	35	11	27	19	7
	Belman 2nd	44	18	26	20	24	6
	Ames Plantation Babsmere	35	9	26	21	14	5
	Blackcap Revolution B 3rd	35	12	23	16	19	5
Hereford	Prince Domino Return	107	61	46	65	42	13
	Super Superior 3rd	81	36	45	32	49	12
	Beau Beauty	60	31	29	18	42	8
	Woodford Domino 3rd	59	34	25	36	23	10
	Publican Domino 10th	57	17	40	57	--	7
	Aaron Domino	51	11	40	31	20	11
	WHR Princeps Domino 11th	49	27	22	26	23	13
	Woodford Domino 7th	40	14	26	20	20	9
	Hazford Tone 76th	38	29	9	16	22	4
	Don Axtell 16th	37	24	13	11	26	7
	Vagabond Mischief	37	15	22	--	37	5
Shorthorn	Fascinator	82	0	82	33	49	9
	Goldspur's Baronet 2nd	80	59	21	46	34	11
	Raveni Masterpiece	67	30	37	37	30	10
	Browndale Goldspur	61	28	33	54	7	8
	Brawith Chief	54	30	24	13	41	8
	Raveni Leader	44	26	18	32	12	8
	Sni-a-Bar Golden Ring	40	0	40	32	8	5
	Browndale Pilot	32	32	0	20	12	4
	Collynie Justright	31	23	8	23	8	4
	Sultan Browndale	31	23	8	10	21	6

----------oOo----------

PIG CROP DATA

The Bureau of Agricultural Economics estimated the fall pig crop of 1938 to be 18 percent larger and the spring pig crop of the same year as 13 percent larger, than the corresponding crops of 1937. The recent December survey shows that the number of sows indicated to farrow in the spring of 1939 would be 21 percent larger than the number that farrowed in the spring of 1938.

The combined spring and fall pig crop of 1938 is estimated at 71,088,000 head, an increase of 15 percent over 1937. The indicated 21 percent increase in 1939 spring farrowings would be one of the largest percentage increases in recent years, but about 6 percent below the 1929-33 average.

The number of hogs over 6 months old remaining on Corn Belt farms, December 1, 1938, was reported as only about 5 percent larger than a year earlier.

----------oOo----------

RECENT PUBLICATIONS

(This list is limited to publications of interest to extension workers. In most cases copies are available from the institution or agency issuing them. Do not write Washington for other than U.S.D.A. publications.)

Federal

"Market Classes and Grades of Feeder and Stocker Cattle" by W.O. Fraser and Don J. Slater - Bureau of Agricultural Economics, U.S.D.A., Washington, D.C., Circ. 505, Oct. 1938, pp. 19, illus. 6.

"Shrinkage of Grease Wool in Relation to Prices" by Russell L. Burrus and James J. Window - Bureau of Agricultural Economics, U.S.D.A., Washington, D.C. - Sept. 1938, pp. 12, multigraphed.

"Direct Buying of Slaughter Livestock by Regions, 1923-37" by Knute Bjorka - Bureau of Agricultural Economics, U.S.D.A., Washington, D.C. - Jan. 1939. pp. 28, mimeographed.

"Driven-In Receipts of Livestock, 1938" - Bureau of Agricultural Economics, U.S.D.A., Washington, D.C. - Jan. 1939. pp. 34, mimeographed.

"Report of the Chief of the Bureau of Animal Industry, 1938" - Bureau of Animal Industry, U.S.D.A., Washington, D.C., Sept. 1938, pp. 85.

"Artificial Insemination of Livestock" by W. V. Lambert - Bureau of Animal Industry, U.S.D.A., Washington, D.C. - A.H.D. No. 29, Jan. 1939, pp. 7, mimeographed.

"Comparison of Alfalfa and Western Wheat-Grass Hays for Wintering Yearling Heifers in the Northern Great Plains and Their Influence on Summer Gains" by A. L. Baker - Bureau of Animal Industry, U.S.D.A., Washington, D. C. - Tech. Bul. 635, Nov. 1938, pp. 8.

"Vaccination of Calves and Yearlings Against Bang's Disease" by J. M. Buck, et al. - Bureau of Animal Industry, U.S.D.A., Washington, D.C., - Tech. Bul. 658, Oct. 1938, pp. 7.

"Rearing Foals and Lambs by the Use of Colostrum, Blood Serum, and Substitute Milks" by J. A. Gamble, et al. - Bureau of Animal Industry, U.S.D.A., Washington, D.C. - Tech. Bul. 661, Dec. 1938, pp. 35.

"Coordination of Agricultural Programs" by H. W. Hochbaum - Extension Service, U.S.D.A., Washington, D.C. - Circ. 202, Feb. 1939, pp. 5, mimeographed.

"Preparation and Training of Extension Workers" by M. C. Wilson and Lucinda Crile - Extension Service, U.S.D.A., Washington, D.C. - Circ. 295, Nov. 1938, pp. 33, mimeographed.

"What Camera Shall I Buy?" by C.H. Hanson - Extension Service, U.S.D.A., Washington, D. C. - Dec. 1938, pp. 9, mimeographed.

State

"Lamb Diseases in Colorado Feedlots" by I.E. Newsom and Frank Thorp, Jr. - Colorado Experiment Station Bulletin 448, Aug. 1938, pp. 42, illus. 26.

"Corn of Different Degrees of Hardness for Pigs," by C.C. Culbertson, et al. - Iowa Experiment Station Bulletin 375, Aug. 1938, pp. 19.

"A Progress Report of the Regional Research Laboratory for the Improvement of Swine Through Breeding" - Regional Swine Research Laboratory, Ames, Iowa, June 1938, pp. 34, mimeographed.

"Factors Affecting the Place of Sheep on Kentucky Farms" by Geo. B. Byers and D.E. Bayless - Kentucky Experiment Station Bulletin 385, Sept. 1938, pp. 32.

"Pork Production" by Chas. I. Bray - Louisiana Experiment Station Bulletin 303, Nov. 1938, pp. 30.

"Seasonal Composition and Yields of Pastures" by R. H. Lush - Louisiana Experiment Station Bulletin 299, Sept. 1938, pp. 24, tables 14.

"Survey of the New Orleans Livestock Market Since 1925" by J. M. Baker - Louisiana Experiment Station Bulletin 300, Sept. 1938, pp. 36, with tables and graphs.

"Effects of Castration of Lambs on Their Development and Quality of Meat" by Wells E. Hunt, et al. - Maryland Experiment Station Bulletin 417, June 1938, pp. 20, tables 11.

"Sheep and Wool" by M. E. Ensminger - Massachusetts Extension Service Leaflet 179, Oct. 1938, pp. 52, illus. 17.

"Horse Production," by M. E. Ensminger - Massachusetts Extension Service Leaflet 180, Nov. 1938, pp. 52, illus. 22.

"Effect of Cut, Grade, and Class Upon Palatability and Composition of Beef Roasts" by Mary Satorius and Alice M. Child - Minnesota Experiment Station Technical Bulletin 131, Oct. 1938, pp. 16.

"Using Horses on the Farm" by A. L. Harvey - Minnesota Extension Service Bulletin 145, Rev. Dec. 1938, pp. 20, illus. 7.

"Stallion Registration Board" by A. L. Harvey - University Farm, St. Paul, Minnesota, Dec. 1938, pp. 43.

"The Picket Fence Silo" - Mississippi Extension Service Leaflet No. 12, Oct. 1938, pp. 3.

"Corn Versus Barley for Fattening Steers" by T.H. Hopper, et al - North Dakota Experiment Station Bulletin 290, Sept. 1938, pp. 18.

"A Comparison of Cottonseed Meal, Cottonseed Meal and Tankage, Peanut Oil Meal, and Soybean Oil Meal, Fed with Corn Silage for Fattening Two-Year-Old Steers" by M. Jacob and H.R. Duncan - Tennessee Experiment Station Bulletin 167, Oct. 1938, pp. 7.

"Range Herd Record" by A. L. Smith - Texas Extension Service Leaflet D-177, pp. 16.

"Oat Mill Feed in Livestock Rations" by G. Bohstedt and A. W. Lathrop - Wisconsin Experiment Bulletin 441, June 1938, pp. 55, illus. 10.

Other

"Control of Equine Encephalomyelitis (Sleeping Sickness)" by Dr. H.W. Schoening - Leaflet No. 234, Horse and Mule Association of America, 407 S. Dearborn St., Chicago, Ill., pp. 32.

"The Tennessee Walking Horse" - 7-page leaflet - Tennessee Walking Horse Breeders' Association of America, Lewisburg, Tenn.

"Vision and Courage Build Better Livestock - 1939 Feeding Practices" - Educational Service, National Cottonseed Products Association, Inc., 1411 Santa Fe Bldg., Dallas, Tex.

----------oOo----------